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The Seabird Colony Protection Program is a new program aimed at improving the survival and recruitment of Central California Coast seabird colonies harmed by the 1998 *Command* oil spill. An estimated 1,490 Common Murres and other surface-nesting seabirds were killed or injured, and many miles of beaches between Ano Nuevo and Pacifica were lightly oiled. Specifically, an estimated 3,000 gallons of IBF 380 (Fuel Oil No. 6) was spilled and oil sat offshore of the San Mateo coast approximately four days before any came ashore.

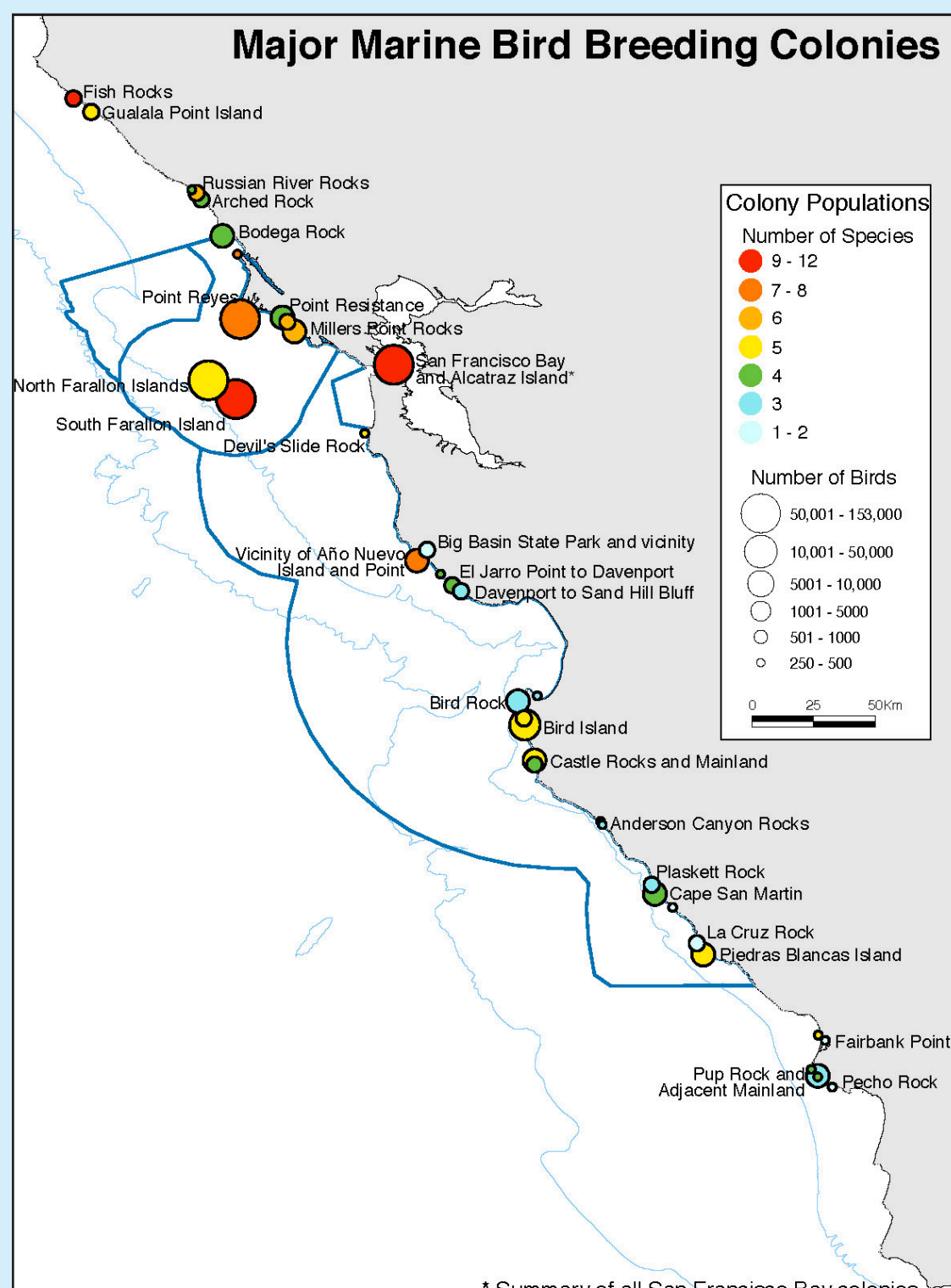


The *Command* was held criminally accountable for illegally dumping oil, which led to the recovery of \$4,000,000 for natural resource damages. These damages spurred the formation of the *Command* Oil Spill Natural Resource Trust and the *Command* Oil Spill Restoration Fund. This program will use a portion of these funds to address one of the biggest obstacles to the recovery of these populations: human disturbance. Gulf of the Farallones National Marine Sanctuary is taking a lead coordination role in implementing the program in collaboration with U.S. Fish and Wildlife Service and other sanctuaries, agencies and organizations.



**To improve the survival and recruitment of seabirds by reducing human disturbances at breeding and roosting sites from Point Reyes to Point Sur, with an emphasis on species most affected by the *Command* oil spill.**

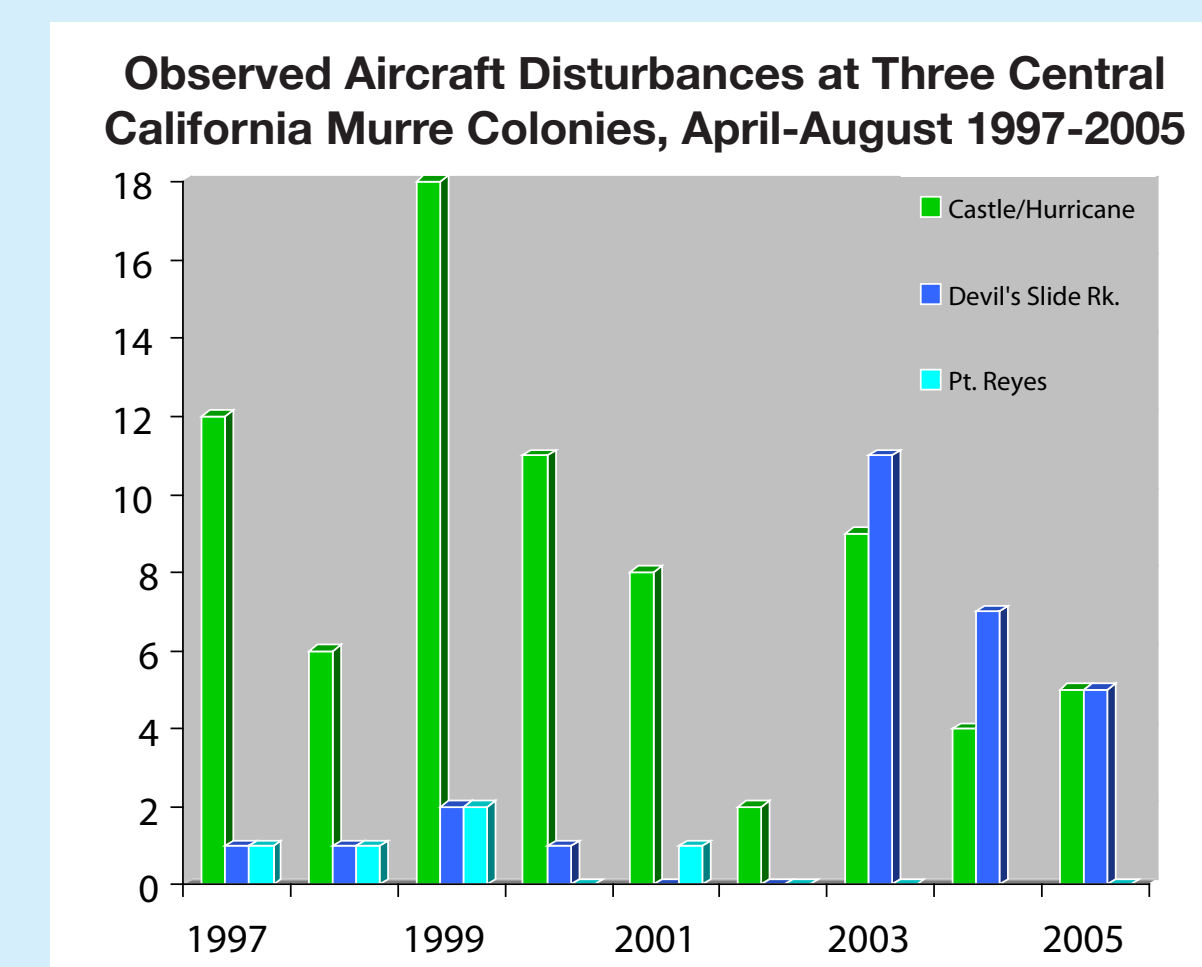
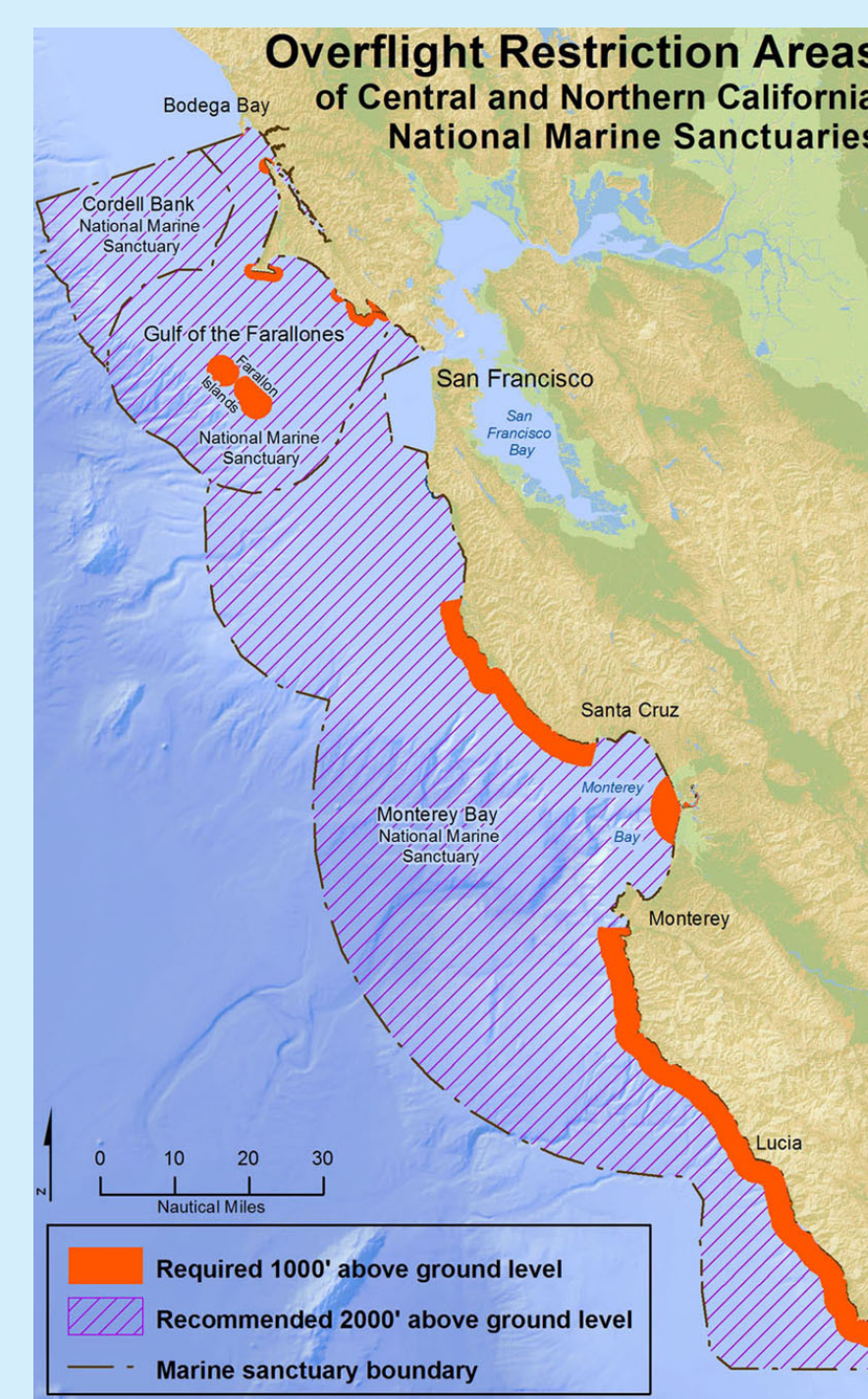
The program's primary target species are seabirds that nest and roost on the surface of cliffs or offshore rocks including: Common Murres, Brandt's Cormorants, Double-crested Cormorants, Pelagic Cormorants and Brown Pelicans. These populations are still recovering from past declines. Restoration efforts, such as the restoration projects at Devil's Slide Rock and Castle/Hurricane Rocks, have been underway for several years, but human disturbance has been identified as a main factor impeding recovery at some colonies.



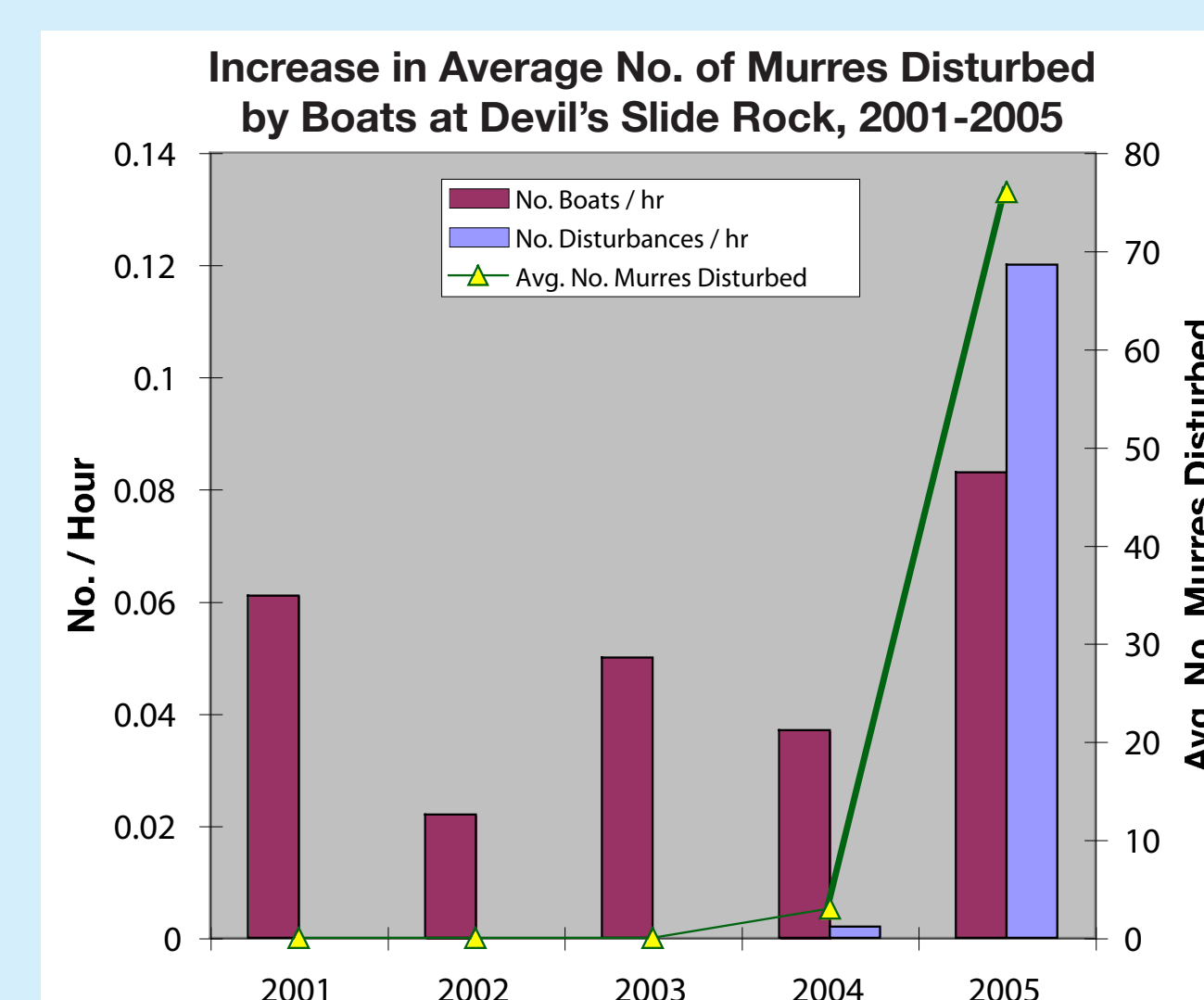
Human disturbance impacts seabird survival and recruitment by: disrupting courtship, nest defense, nest prospecting, and foraging; increased egg and chick abandonment or loss; increased stress levels; and higher energy costs.

High levels of disturbance, including frequent disturbance or a single severe event, can cause colony abandonment.

**1) LOW-FLYING AIRCRAFT-** including law enforcement, military and private planes and helicopters, ultralight crafts, commercial or film crews and media. Aircraft disturbance has been the biggest problem and is increasing in some areas. Helicopters have been shown to cause the most flushing per incident.



2) **BOATS**– including kayaks, wildlife viewing boats, commercial and recreational fishing vessels, private motorized vessels and jet skis. Boats have caused the most severe observed impacts, but tend to be less frequent.



**3) HUMANS ON FOOT**- including beach walking and recreation, coastal hikers and pets that are unleashed in sensitive areas. Humans on foot have not been an observed problem for the offshore colonies, but it can be a problem at mainland breeding sites.



- Documenting types and levels of human disturbance at Central California Coast seabird colonies and any changes occurring over time as the program is implemented;
- Increasing seabird disturbance information exchange at key events/venues;
- Increasing awareness among organized users who impact nest prospecting, pre-breeding, roosting, nesting and breeding seabird colonies;
- Increasing Central California Coast seabird protection coordination among agencies, non-governmental organizations, researchers and stakeholders;
- Increasing the number of agencies, non-governmental organizations, researchers and interested public reporting incidents of seabird disturbance;
- Documenting program success levels through monitoring and evaluation.



- Determining where and what kind of human disturbance has the greatest effect on seabirds;
- Providing education and outreach at organized events, association meetings, conferences and air and boat shows, while targeting ecotourism vendors and individuals such as researchers, rangers, sea kayakers, coastal recreational users, commercial and recreational fishermen, whale watchers and students;
- Reviewing regulatory approaches, performing a gap analysis, and determining current and future enforcement and regulatory needs; and
- Working with enforcement agencies on the federal, state, and local level to ensure laws that protect seabirds are enforced.